

CLAIMS

1. A clipping circuit for limiting amplitude of an orthogonal baseband signal to be supplied to a power amplifier in a radio transmitter, comprising polygonal clipping means including a plurality of stages in cascade connection,

each of the stages comprising rectangular clipping means and phase rotating means connected in series.

2. The clipping circuit in accordance with claim 1, further comprising amplitude adjusting means for compensating and adjusting a change in signal amplitude of the baseband signal from the rectangular clipping means and the phase rotating means.

3. The clipping circuit in accordance with claim 1 or 2, comprising n (an integer equal to or more than two) stages in cascade connection, each of the stages comprising the rectangular clipping means and the phase rotating means connected in series,

the rectangular clipping means in a first stage including a clip level beforehand set to a predetermined clip level,

each of the rectangular clipping means in a second and subsequent stages including a clip level set to a value obtained by multiplying the predetermined clip level by a quantity of correction corresponding to variation in amplitude of the baseband signal associated with phase rotation in the phase rotating means in a previous stage of the rectangular clipping means.

4. The clipping circuit in accordance with one of claims 1 to 3, further comprising control means for controlling, if the amplitude of the orthogonal baseband signal takes a value more

than the predetermined clip level, the polygonal clipping means to process the orthogonal baseband signal.

5. The clipping circuit in accordance with claim 4, wherein if the amplitude of the orthogonal baseband signal takes a value equal to or less than the predetermined clip level, the control means adjusts time for output of the orthogonal baseband signal corresponding to processing time of the polygonal clipping means.

6. A transmitter comprising a clipping circuit in accordance with one of claims 1 to 5.